

## NATIONAL SUPER-CONDUCTIVITY PROGRAMME

**292. SHRI BHAGEY GOBARDHAN :**  
Will the **PRIME MINISTER** be pleased to state :

(a) the objectives of the National Super-Conductivity Programme in the context of "Development of Technology" in the country ;

(b) whether development of an efficient conductor so as to minimise losses in the power transmission system is also a part of this programme; and

(c) if so, the progress and achievements of the National Super-Conductivity Programme till date ?

**THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRI-MATI MARGARET ALVA) :** (a) The broad objectives of National Super-Conductivity Programme (NSP) in the context of "development of technology", according to the Govt Resolution of 27th Feb., 1991, on National Superconductivity Science & Technology Board (NSTB), are as follows.

- (i) Synthesis of high quality High Temperature Super-Conducting (HTSC) materials in bulk quantities ,
- (ii) Making performed/shaped objects, wires, tapes and cables out of super-conducting materials ,
- (iii) Development/engineering of super-conducting devices/subsystems/systems for a variety of applications, including electronics/electrical application; and
- (iv) Development/engineering of prototype electromagnets for use in industrial and electrical applications; and
- (v) Promotion of industrialisation of super-conductivity technology.

(b) and (c) Individual projects within the above broad objectives have been supported. Power transmission applications of

superconductivity and development of superconducting wires for this use are not envisaged at the present state of technology. Superconductors could minimise the transmission losses by minimising resistive losses in the lines but these require cryogenic environment for the operations, and the techno-economic advantages of super-conducting wires vis-a-vis High Voltage Direct Current (HVDC) Transmission, etc for various applications are yet to be established. In NSP in India, a few projects have been taken up in the area of high temperature superconducting wires/tape development for general purpose use.

## R & D PROJECTS FOR DEVELOPING TECHNOLOGIES FOR TRANSFER

**293 SHRI BHAGEY GOBARDHAN :**  
Will the **PRIME MINISTER** be pleased to state

(a) the list of R&D projects so far supported by the Union Government for developing technologies for transfer ;

(b) the names of technologies resulting from such projects; and

(c) the follow-up action taken by industry in each case for commercialisation of such technologies ?

**THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRI-MATI MARGARET ALVA) :** (a) to (c) Information is being collected and will be laid on the Table of the House.

## INFORMATION REGARDING PEPSI PROJECTS

**294 SHRI RAJNATH SONKAR SHASTRI** Will the Minister of **FOOD PROCESSING INDUSTRIES** be pleased to refer to the reply given on 27 February, 1991 to USQ No. 767 and state :

(a) whether the team constituted by the Government to visit the various Pepsi Projects and assess the present status has since collected the facts and information from M/s Pepsi Foods;

(b) if so, the details thereof; and